

AIR QUALITY PERMIT

Issued To: Helena Sand & Gravel, Inc.
d.b.a. Blahnik Construction
759 US Hwy 93 N
PO Box 1129
Hamilton, MT 59840

Permit #2735-03
Application Complete: 2/29/08
Preliminary Determination Issued: 4/4/08
Department's Decision Issued: 4/22/08
Permit Final:
AFS #777-2735

An air quality permit, with conditions, is hereby granted to Helena Sand & Gravel, Inc., doing business as Blahnik Construction (Blahnik), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and the Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

SECTION I: Permitted Facilities

A. Plant Location

Blahnik operates a portable parallel drum-mix asphalt plant and associated equipment. The original location is the southwest ¼ of the northeast ¼ of Section 12, Township 6 North, Range 21 West, in Ravalli County, Montana. However, Permit #2735-03 applies while operating at any location within Montana, except within those areas having a Department of Environmental Quality (Department)-approved permitting program, or those areas considered to be tribal lands. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.*

Addendum 3 and Permit #2735-03 apply to the Blahnik facility while operating at specific locations in or within 10 kilometers (km) of certain particulate matter less than 10 microns (PM₁₀) nonattainment areas during the winter months, as approved by the Department, and at any location in or within 10 km of any PM₁₀ nonattainment areas during the summer months. A list of permitted equipment is included in Section I.A of the Permit Analysis.

B. Current Permit Action

On January 22, 2008, the Department received a request from Blahnik for a permit modification. Specifically, this permit modification adds a 676-horsepower (hp) diesel genset unit, and updates Addendum 2 (which expired in 1999) to Addendum 3, to allow for operation in or within 10 km of certain PM₁₀ nonattainment areas. Further, the Department updated the emission inventory for the permitted facility to reflect up-to-date published emission factors for hot-mix asphalt plants and updated Addendum 3 to reflect current Department modeling guidance for portable or temporary sources operating in or within 10 km of certain PM₁₀ nonattainment areas during the winter season.

SECTION II: Conditions and Limitations

A. Emission Limitations

1. Blahnik's asphalt plant particulate matter (PM) emissions shall be limited to 0.04 grains per dry standard cubic feet (gr/dscf) (ARM 17.8.752, ARM 17.8.340, and 40 CFR 60, Subpart I).

2. Blahnik shall not cause or authorize to be discharged into the atmosphere from the asphalt plant stack emissions that exhibit 20% opacity or greater averaged over 6 consecutive minutes (ARM 17.8.752, ARM 17.8.340, and 40 CFR 60, Subpart I).
3. Blahnik shall not cause or authorize to be discharged into the atmosphere from New Source Performance Standard (NSPS)-affected equipment, including systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler; systems for mixing hot-mix asphalt; and the loading, transfer, and storage systems associated with emission control systems, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.752, ARM 17.8.340, and 40 CFR 60, Subpart I).
4. Blahnik shall not cause or authorize to be discharged into the atmosphere, from any non-NSPS affected equipment, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
5. Water and spray bars shall be available on site at all times and operated as necessary to maintain compliance with the opacity limitations in Sections II.A.3 and II.A.4 (ARM 17.8.749).
6. Blahnik shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308 and ARM 17.8.752).
7. Blahnik shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.6. (ARM 17.8.752).
8. Blahnik must install, operate, and maintain a fabric filter for air pollution control on the lime silo (ARM 17.8.749).
9. Blahnik must install, operate, and maintain a baghouse for air pollution control on the drum mix asphalt plant. Blahnik must install and maintain a device to measure the pressure drop (magnehelic gauge, manometer, etc.) across the control device. Pressure drop must be measured in inches of water. Blahnik must also install and maintain temperature indicators at the control device inlet and outlet (ARM 17.8.749).
10. Once a stack test is performed, the asphalt production rate shall be limited to the average production rate during the last source test demonstrating compliance (ARM 17.8.749).
11. Hours of operation for the asphalt plant shall not exceed 4400 hours during any rolling 12-month time period (ARM 17.8.749 and ARM 17.8.1204).
12. Blahnik shall operate no more than one diesel-fired generator with a maximum rated design capacity of 676-hp (ARM 17.8.749).

13. Emissions from the diesel-fired generator shall not exceed the following limits, on a pounds per brake-horsepower hour (lb/bhp-hr) basis (ARM 17.8.752):

| | |
|--|------------------|
| Oxides of Nitrogen (NO _x): | 0.020 lb/bhp-hr |
| Carbon Monoxide (CO): | 0.0007 lb/bhp-hr |
| Volatile Organic Compounds (VOC): | 0.0012 lb/bhp-hr |
| PM ₁₀ : | 0.0007 lb/bhp-hr |
14. Operation of the diesel engine shall not exceed 4400 hours during any rolling 12-month time period (ARM 17.8.749 and ARM 17.8.1204).
15. If the permitted equipment is used in conjunction with any other equipment owned or operated by Blahnik, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month period. Any calculation used to establish production levels shall be approved by the Department (ARM 17.8.749).
16. Blahnik shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR 60, Subpart I, *Standards of Performance for Hot Mix Asphalt Facilities* (ARM 17.8.340 and 40 CFR 60, Subpart I).
17. Blahnik shall comply with all applicable standards and limitations, and the reporting, record keeping, and notification requirements contained in 40 CFR 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*, and 40 CFR 63, Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, for any applicable diesel engines (ARM 17.8.340 and 40 CFR 60, Subpart IIII, ARM 17.8.342 and 40 CFR 63, Subpart ZZZZ).

B. Testing Requirements

1. Method 5 source testing shall be performed on the asphalt plant on an every 4-year basis, or according to another testing/monitoring schedule as may be approved by the Department, in order to demonstrate compliance with the particulate matter (PM) limit contained in Section II.A.1. Pressure drop on the control device and temperatures must be recorded during the compliance source test and reported as part of the test results.

 Since asphalt production will be limited to the average production rate during the compliance source test, it is suggested the test be performed at the highest production rate practical. Blahnik may retest at any time in order to test at a higher production rate (ARM 17.8.105 and ARM 17.8.749).
2. Method 9 source testing shall be performed on the asphalt plant and other NSPS-affected equipment, including every screening operation and belt conveyor, on an every 4-year basis, or according to another testing/monitoring schedule as may be approved by the Department, in order to demonstrate compliance with the opacity limits contained in Sections II.A.2 and II.A.3. The Method 9 test should be conducted in conjunction with the Method 5 PM test contained in Section II.B.1 (ARM 17.8.105 and ARM 17.8.340 and 40 CFR 60, Subpart I).

3. The asphalt plant baghouse pressure drop and temperature must be recorded daily and kept on-site, according to Section II.C.4 (ARM 17.8.749).
4. All compliance source tests must be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
5. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. If this asphalt plant is moved to another location, an Intent to Transfer form must be sent to the Department and a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.749 and ARM 17.8.765).

2. Blahnik shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in Section I.A of the permit analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

3. Blahnik shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745, that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. This notice must be submitted to the Department, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745 (1)(d) (ARM 17.8.745).
4. If the diesel-fired Genset unit is replaced with a de minimis-friendly unit, Blahnik shall provide notification to the Department in conformance with Section II.C.3 as well as 40 CFR Part 60 and Part 63 (ARM 17.8.745, ARM 17.8.340 and ARM 17.8.342).
5. Blahnik shall maintain on-site records showing:
 - Daily hours of operation for the asphalt plant,
 - Daily hours of operation for the generator,
 - Daily asphalt production, and
 - Daily pressure drop and temperature readings across the asphalt plant baghouse.

The records compiled in accordance with this permit shall be maintained by Blahnik as a permanent business record for at least 5 years following the date of

- the measurement, must be available at the plant for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).
6. Blahnik shall document, by month, the hours of operation for the asphalt plant. By the 25th day of each month, Blahnik shall calculate the hours of operation for the asphalt plant during the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.11. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
 7. Blahnik shall document, by month, the hours of operation of the diesel generator. By the 25th day of each month, Blahnik shall calculate the hours of operation for the diesel generator for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.12. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
 8. Blahnik shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit as required by ARM 17.8.1204(3)(b). The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted with the annual emissions inventory information (ARM 17.8.1204).

SECTION III: Addendum 3

Blahnik shall comply with all conditions in Addendum 3 to Permit #2735-03 when operating in or within 10 km of certain PM₁₀ nonattainment areas as described in Addendum 3 (ARM 17.8.749).

SECTION IV: General Conditions

- A. Inspection - Blahnik shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver - The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Blahnik fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations - Nothing in this permit shall be construed as relieving Blahnik of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement - Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties, or other enforcement, as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals – Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not

stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.

- F. Permit Inspection - As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Permit Fee - Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Blahnik may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Construction Commencement - Construction must begin within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked (ARM 17.8.762).
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.
- J. Blahnik shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas having a Department-approved permitting program.

PERMIT ANALYSIS
Helena Sand & Gravel, Inc.
dba Blahnik Construction
Permit #2735-03

I. Introduction/Process Description

A. Permitted Equipment

Helena Sand & Gravel, Inc., doing business as Blahnik Construction (Blahnik) owns and operates a portable drum-mix asphalt plant. Equipment used at the facility includes:

- 1992 Portable Asphalt Plant – parallel flow drum mix process, with baghouse (maximum 240 tons per hour (ton/hr) asphalt production);
- Asphalt hot oil storage with diesel burner (approx 7.5 gallons per hour (gph));
- Aggregate storage piles, storage bins, screens, and conveyors;
- Lime silo with dust control (30 ton capacity, 2.5 ton/hr throughput rate);
- Hot mix asphalt storage silo filling & truck loadout;
- 676 horsepower (hp) backup diesel generator (454 kilowatt (kW));
- Diesel fuel storage tank (up to 10,000 gallons); and
- Associated equipment.

B. Source Description

For a typical operational set-up, stockpiled aggregate is loaded into the cold feeder. The aggregate is dispensed from the bins, and dumped onto feeder conveyors that transfer the aggregate to the drum-mix dryer. The aggregate travels through the rotating drum where asphalt oil and lime are added to the dryer. The dryer drum mixes the asphalt oil, lime, and the aggregate. The resulting hot-mix asphalt is loaded into a hot-mix asphalt storage silo, where it is stored until the asphalt is dumped into trucks for transport to the project site.

C. Permit History

On July 2, 1992, **Permit #2735-00** was issued to Blahnik Construction, Inc. to operate a portable asphalt plant. The facility was originally operated in the southwest 1/4, of the northeast 1/4 of Section 12, Township 6 N, Range 21 W, in Ravalli County, Montana.

On September 9, 1997, Blahnik requested an addendum to Permit #2735-00 to operate in Lots 3 and 4 of Section 3, Township 31 N, Range 19 W of Flathead County, Montana. This site location is within 10 kilometers (km) of the Columbia Falls particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment area. **Permit #2735-01** replaced Permit #2735-00 and **Addendum 1** to Permit #2735-01 was established.

On December 15, 1998, Blahnik requested a modification of Permit #2735-01 and Addendum 1. The modified permit allowed for summer months operation (April 1 through September 30) in or within 10 km of any of the following PM₁₀ non-attainment areas (NAAs): Kalispell, Whitefish, Colombia Falls, Butte, Lincoln, Libby, and Thompson Falls. **Permit #2735-02** replaced Permit #2735-01 and **Addendum 2** replaced Addendum 1.

D. Current Permit Action

On January 22, 2008, the Department received a request from Blahnik for a permit modification. Specifically, this permit modification added a 676-hp diesel genset unit with associated diesel fuel storage tank, and updated Addendum 2 (which expired in 1999) to **Addendum 3**, to allow for operation in or within 10 km of certain PM₁₀ nonattainment areas. Further, the Department updated the emission inventory for the permitted facility to reflect up-to-date published emission factors for hot-mix asphalt plants as well as updated Addendum 3 to reflect current Department modeling guidance for portable or temporary sources operating in or within 10 km of certain PM₁₀ nonattainment areas during the winter season. **Permit #2735-03** replaces Permit #2735-02 and Addendum 3 replaces Addendum 2.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts and environmental assessments, is included in the initial analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department. Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

A. ARM 17.8, Subchapter 1 – General Provisions, including, but not limited to:

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

Blahnik shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by

telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation, or to continue for a period greater than 4 hours.

5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

B. ARM 17.8, Subchapter 2 – Ambient Air Quality, including, but not limited to:

1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
5. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

Blahnik must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 – Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter (PM). (2) Under this rule, Blahnik shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.
4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.
5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.
6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank truck or trailer is equipped with a vapor loss control device as described in (1) of this rule.
7. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule

incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS), including the following subparts:

- a. 40 CFR 60, Subpart I: Standards of Performance for Hot Mix Asphalt Facilities, applies to a hot mix asphalt facility constructed or modified after June 11, 1973. Therefore, the facility is subject to the requirements of 40 CFR Part 60, Subpart I.
- b. 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE), indicates that NSPS requirements apply to owners or operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE is manufactured after April 1, 2005, and is not a fire pump engine. This NSPS will apply if the engine remains or will remain at the permitted location for more than 12 months, or a shorter period of time for an engine located at a seasonal source. A seasonal source remains at a single location on a permanent basis (at least 2 years) and operates 3 months or more each year.

The proposed 676-hp diesel generator engine is a CI ICE manufactured before April 1, 2005. Therefore, NSPS requirements do not apply to this particular engine. However, since this permit is written in a de minimis-friendly manner, NSPS requirements may apply to future engines.

8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. The source, as defined and applied in 40 CFR Part 63, shall comply with the requirements of 40 CFR Part 63, as listed below:

- a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to a Maximum Achievable Control Technology (MACT) Subpart as listed below:
- b. 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). As an area source, any diesel RICE engine operated by Blahnik that is new or reconstructed after June 12, 2006, will be subject to this MACT standard if the engine remains or will remain at the permitted location for more than 12 months, or a shorter period of time for an engine located at a seasonal source. A seasonal source remains at a single location on a permanent basis (at least 2 years) and operates 3 months or more each year.

The proposed 676-hp diesel generator engine is a CI ICE manufactured before June 12, 2006. Therefore, MACT requirements do not apply to this particular engine. However, since this permit is written in a de minimis-friendly manner, MACT requirements may apply to future engines.

- D. ARM 17.8, Subchapter 5 – Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that Blahnik submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. Blahnik submitted the

appropriate permit application fee for the current permit action.

2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department. This air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation -fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

- E. ARM 17.8, Subchapter 7 – Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit alteration to construct, alter, or use any asphalt plant, crusher or screen that has the Potential to Emit (PTE) greater than 15 tons per year (TPY) of any pollutant. Blahnik has a PTE greater than 15 TPY of PM, PM₁₀, nitrogen oxides (NO_x), carbon monoxide (CO), and volatile organic compounds (VOC); therefore, an air quality permit is required.
3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
4. ARM 17.8.745 Montana Air Quality Permit--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that are not subject to the Montana Air Quality Permit Program.
5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. This rule requires that a permit application be submitted prior to installation, alteration or use of a source. Blahnik submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Blahnik submitted an affidavit of publication of public notice for the February 27, 2008, issue of the *Ravalli Republic*, a newspaper of general circulation in the Town of Hamilton in Ravalli County, as proof of compliance with the public notice requirements.
6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal

Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.

7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that Best Available Control Technology (BACT) shall be utilized. The BACT analysis is discussed in Section III of this Permit Analysis.
8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Blahnik of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an air quality permit may be transferred from one location to another if the Department receives a complete notice of intent to transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules.

(2) This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.

F. ARM 17.8, Subchapter 8 – Prevention of Significant Deterioration of Air Quality, including, but not limited to:

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
2. ARM 17.8.818 Review of Major Stationary Sources and Major Modification--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source since it is not a listed source and the facility's PTE is less than 250 tons per year (excluding fugitive emissions) of any air pollutant.

G. ARM 17.8, Subchapter 12 – Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 tons/year of any pollutant;
 - b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tons/year of PM₁₀ in a serious PM₁₀ nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #2735-03 for Blahnik, the following conclusions were made:
 - a. The facility's allowable PTE is less than 100 tons/year for any criteria pollutant, after a restriction on hours of operation are imposed.
 - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is subject to current NSPS standards (40 CFR Part 60, Subpart I and may be subject to Subpart IIII in the future).
 - e. This facility is not subject to any current National Emission Standards for Hazardous Air Pollutants (NESHAP). The facility may be subject to the area source MACT 40 CFR 63, Subpart ZZZZ in the future.

- f. This source is not a Title IV affected source, or a solid waste combustion unit.
- g. This source is not an EPA designated Title V source.

Based on these facts, the Department has determined that Blahnik is a synthetic minor source of emissions as defined under Title V. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, Blahnik may be required to obtain a Title V Operating Permit.

- h. ARM 17.8.1204(3). The Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations which limit that source's PTE.
 - i. In applying for an exemption under this section the owner or operator of the facility shall certify to the Department that the source's PTE does not require the source to obtain an air quality operating permit.
 - ii. Any source that obtains a federally enforceable limit on PTE shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.
- 3. ARM 17.8.1207, Certification of Truth, Accuracy, and Completeness. The compliance certification submittal by ARM 17.8.1204(3) shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this subchapter shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

III. BACT Determination

A BACT determination is required for each new or altered source. Blahnik shall install on the new or altered source the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The diesel generator and the diesel storage tank (up to 10,000 gallons) are the only newly permitted pieces of equipment for this site, and therefore the only ones reviewed for conformance with BACT under this permit action.

For the diesel-fired Genset unit, firing low sulfur diesel fuel with less than 500 ppm sulfur constitutes BACT for SO₂. Due to the relatively small amount of PM, PM₁₀, NO_x, CO, VOC, and SO_x emissions produced by the generator, add-on controls would be cost prohibitive. In addition, the manufacturer's technical data sheet indicates that the emissions of NO_x, CO, VOC and PM₁₀ are all well under the established AP-42 emission factors. These lower emission rates were incorporated into emission limits for the Genset unit, since maintenance of the engine to ensure operation of this engine at the expected performance standards would be considered BACT. Thus, the Department determined that no additional control would constitute BACT for the generator. This determination is similar to other recently permitted similar sources.

For the diesel storage tank, no control is determined to be BACT. Since the potential VOC emissions are so low (less than 2 pounds per year) any add-on control would be cost-prohibitive. This determination is similar to other recently permitted similar sources.

IV. Emission Inventory

| Emitting Unit | Potential to Emit TPY (restricted) | | | | | |
|---|------------------------------------|------------------|-----------------|--------------|--------------|-----------------|
| | PM | PM ₁₀ | NO _x | CO | VOC | SO _x |
| Drum Mix Asphalt Plant Dryer | 7.70 | 12.14 | 29.04 | 68.64 | 16.90 | 5.81 |
| Hot Oil Heater | -- | -- | -- | 0.04 | -- | -- |
| Cold Aggregate Storage Piles | 6.79 | 3.20 | -- | -- | -- | -- |
| Cold Aggregate Screens and Storage Bins | 5.70 | 3.48 | -- | -- | -- | -- |
| Cold Aggregate Handling/Conveyors | 3.17 | 1.17 | -- | -- | -- | -- |
| Lime Silo | 0.37 | 0.37 | -- | -- | -- | -- |
| Asphalt Product Silo Filling | 0.04 | 0.13 | -- | | | -- |
| Drum Mix Plant Asphalt Load-Out | 0.26 | 0.18 | -- | | | -- |
| Diesel Generator | 1.10 | 1.10 | 29.44 | 0.97 | 0.18 | 3.06 |
| Haul Roads/Vehicle Traffic | 12.68 | 3.60 | -- | -- | -- | -- |
| Total | 37.81 | 25.37 | 58.48 | 70.97 | 25.58 | 8.87 |

Note: The potential to emit is based on restricted annual operations of less than 4400 hours/year.

Estimated PM_{2.5} Emission Inventory

| Emitting Unit | PM _{2.5} PTE ton/yr (restricted) |
|------------------------------|---|
| Drum Mix Asphalt Plant Dryer | 10.25 |
| Diesel Generator | 1.10 |
| Total | 11.35 |

Note: The PM_{2.5} emission estimates are based on the best available AP-42 factors.

Emission Calculations

Drum-Mix Asphalt Plant Dryer

Operating Parameters:

Operating Hours: 4400 hr/yr (Permit Limit)
 Process Air Flow Rate 10,200 dscfm
 Process Rate: 240 ton/hr (Company Information)

PM Emissions

Emission Factor: 0.04 gr/dscf (BACT Limit)
 Calculations: 0.04 gr/dscf * 10200 dscfm * 1 lb/7000 gr * 60 min/hr = 3.50 lb/hr
 3.50 lb/hr * 4400 hr/yr * 0.0005 ton/lb = 7.70 ton/yr

PM₁₀ Emissions

Emission Factor: 0.023 lb/ton (AP-42, Section 11.1, Table 11.1-3, Drum Mix, Fabric Filter, 3/04)
 Calculations: 0.023 lb/ton * 240 ton/hr = 5.52 lb/hr
 5.52 lb/hr * 4400 hr/yr * 0.0005 ton/lb = 12.14 ton/yr

NO_x Emissions

Emission Factor: 0.055 lb/ton (AP-42, Section 11.1, Table 11.1-7, Drum Mix, Fabric Filter, 3/04)
 Calculations: 0.055 lb/ton * 240 ton/hr = 13.20 lb/hr
 13.20 lb/hr * 4400 hr/yr * 0.0005 ton/lb = 29.04 ton/yr

CO Emissions

Emission Factor: 0.13 lb/ton (AP-42, Section 11.1, Table 11.1-7, Drum Mix, Fabric Filter, 3/04)

| | | |
|---------------|--|--------------|
| Calculations: | 0.13 lb/ton * 240 ton/hr = | 31.20 lb/hr |
| | 31.20 lb/hr * 4400 hr/yr * 0.0005 ton/lb = | 68.84 ton/yr |

VOC Emissions

| | | |
|------------------|---|--------------|
| Emission Factor: | 0.032 lb/ton (AP-42, Section 11.1, Table 11.1-8, Drum Mix, Fabric Filter, 3/04) | |
| Calculations: | 0.032 lb/ton * 240 ton/hr = | 7.68 lb/hr |
| | 7.68 lb/hr * 4400 hr/yr * 0.0005 ton/lb = | 16.90 ton/yr |

SOx Emissions

| | | |
|------------------|---|-------------|
| Emission Factor: | 0.011 lb/ton (AP-42, Section 11.1, Table 11.1-7, Drum Mix, Fabric Filter, 3/04) | |
| Calculations: | 0.011 lb/ton * 240 ton/hr = | 2.64 lb/hr |
| | 2.64 lb/hr * 4400 hr/yr * 0.0005 ton/lb = | 5.81 ton/yr |

Hot Oil Heater

Operating Parameters:

| | | |
|--------------------|------------|--|
| Diesel Firing Rate | 7.5 gph | (Company Information- runs @ 6 gph, 80% firing rate) |
| Operating Hours: | 8760 hr/yr | (Annual Capacity – not limited) |

CO Emissions

| | | |
|------------------|---|-------------|
| Emission Factor: | 0.0012 lb/gal (AP-42, Section 11.1, Table 11.1-13, Diesel Fuel, 3/04) | |
| Calculations: | 0.0012 lb/gal * 7.5 gal/hr = | 0.01 lb/hr |
| | 0.01 lb/hr * 8760 hr/yr * 0.0005 ton/lb = | 0.04 ton/yr |

Cold Aggregate Storage Piles

Operating Parameters:

| | | |
|------------------|----------------------------------|--|
| Process Rate: | 240 ton/hr (Company Information) | |
| Piles: | 2 Piles (Assumed) | |
| Operating Hours: | 8760 hr/yr (Annual Capacity) | |

PM Emissions

| | | |
|------------------|---|--|
| Emission Factor: | 0.00322 lb/ton | (AP-42, Section 13.2.4, Equation 13.2.4.3, Predictive Emission Factor, assume PM < 30 microns, 8.15 mph mean wind speed, and 2.525% material moisture content) |
| Calculations: | 0.00322 lb/ton * 240 ton/hr * 2 Piles = | 1.55 lb/hr |
| | 1.55 lb/hr * 8760 hr/yr * 0.0005 ton/lb = | 6.79 ton/yr |

PM₁₀ Emissions

| | | |
|------------------|---|---|
| Emission Factor: | 0.00153 lb/ton | (AP-42, Section 13.2.4, Equation 13.2.4.3, Predictive Emission Factor, see above) |
| Calculations: | 0.00153 lb/ton * 240 ton/hr * 2 Piles = | 0.73 lb/hr |
| | 0.73 lb/hr * 8760 hr/yr * 0.0005 ton/lb = | 3.20 ton/yr |

Cold Aggregate Screens and Storage Bins

Operating Parameters:

| | | |
|------------------|----------------------------------|--|
| Process Rate: | 240 ton/hr (Company Information) | |
| Transfers: | 3 Transfers (Assumed) | |
| Operating Hours: | 4400 hr/yr (Annual Capacity) | |

PM Emissions

| | | |
|------------------|--|-------------|
| Emission Factor: | 0.0036 lb/ton (AP-42, Section 11.19, Table 11.19.2-2, Fines Screening, Controlled, 8/04) | |
| Calculations: | 0.0036 lb/ton * 240 ton/hr * 3 transfers = | 2.59 lb/hr |
| | 2.59 lb/hr * 4400 hr/yr * 0.0005 ton/lb = | 5.70 ton/yr |

PM₁₀ Emissions

| | | |
|------------------|--|-------------|
| Emission Factor: | 0.0022 lb/ton (AP-42, Section 11.19, Table 11.19.2-2, Fines Screening, Controlled, 8/04) | |
| Calculations: | 0.0022 lb/ton * 240 ton/hr * 3 transfers = | 1.58 lb/hr |
| | 1.58 lb/hr * 4400 hr/yr * 0.0005 ton/lb = | 3.48 ton/yr |

Cold Aggregate Handling/Conveyors

Operating Parameters:

Process Rate: 240 ton/hr (Company Information)
 Transfers: 2 Transfers (Assumed)
 Operating Hours: 8760 hr/yr (Annual Capacity)

PM Emissions

| | | |
|------------------|---|-------------|
| Emission Factor: | 0.003 lb/ton (AP-42, Section 11.19, Table 11.19.2-2, Conveyors, 8/04) | |
| Calculations: | 0.003 lb/ton * 240 ton/hr * 2 transfers = | 1.44 lb/hr |
| | 1.44 lb/hr * 4400 hr/yr * 0.0005 ton/lb = | 3.17 ton/yr |

PM₁₀ Emissions

| | | |
|------------------|--|-------------|
| Emission Factor: | 0.0011 lb/ton (AP-42, Section 11.19, Table 11.19.2-2, Conveyors, 8/04) | |
| Calculations: | 0.0011 lb/ton * 240 ton/hr * 2 transfers = | 0.53 lb/hr |
| | 0.53 lb/hr * 4400 hr/yr * 0.0005 ton/lb = | 1.17 ton/yr |

Lime Silo

Operating Parameters:

Fabric Filter Flow Capacity: 1000 dscfm (Similar source information, fabric-filter bin vent)
 Operating Hours: 8760 hr/yr (Annual Capacity)

PM Emissions

| | | |
|------------------|--|-------------|
| Emission Factor: | 0.02 gr/dscf (Engineering Assumption) | |
| Calculations: | 0.02 gr/dscf * 1000 dscfm * 1 lb/7000 gr * 60 min/hr = | 0.17 lb/hr |
| | 0.17 lb/hr * 4400 hr/yr * 0.0005 ton/lb = | 0.37 ton/yr |

PM₁₀ Emissions

| | | |
|------------------|--|-------------|
| Emission Factor: | 0.02 gr/dscf (Engineering Assumption) | |
| Calculations: | 0.02 gr/dscf * 1000 dscfm * 1 lb/7000 gr * 60 min/hr = | 0.17 lb/hr |
| | 0.17 lb/hr * 4400 hr/yr * 0.0005 ton/lb = | 0.37 ton/yr |

Asphalt Product Silo Filing

Operating Parameters:

Process Rate: 240 ton/hr (Company Information)
 Operating Hours: 8760 hr/yr (Annual Capacity)

PM Emissions

| | | |
|------------------|--|-------------|
| Emission Factor: | 0.00008 lb/ton (AP-42, Section 11.1, Table 11.1-14, 3/04, Predictive EF) | |
| Calculations: | 0.00008 lb/ton * 240 ton/hr = | 0.02 lb/hr |
| | 0.02 lb/hr * 4400 hr/yr * 0.0005 ton/lb = | 0.04 ton/yr |

PM₁₀ Emissions

| | | |
|------------------|--|-------------|
| Emission Factor: | 0.00025 lb/ton (AP-42, Section 11.1, Table 11.1-14, 3/04, Predictive EF) | |
| Calculations: | 0.00025 lb/ton * 240 ton/hr = | 0.06 lb/hr |
| | 0.06 lb/hr * 4400 hr/yr * 0.0005 ton/lb = | 0.13 ton/yr |

CO Emissions

| | | |
|------------------|--|-------------|
| Emission Factor: | 0.00118 lb/ton (AP-42, Section 11.1, Table 11.1-14, 3/04, Predictive EF) | |
| Calculations: | 0.00118 lb/ton * 240 ton/hr = | 0.29 lb/hr |
| | 0.29 lb/hr * 4400 hr/yr * 0.0005 ton/lb = | 0.64 ton/yr |

VOC Emissions

| | | |
|------------------|---|---|
| Emission Factor: | 0.01219 lb/ton | (AP-42, Section 11.1, Table 11.1-14, 3/04, Predictive EF) |
| Calculations: | 0.01219 lb/ton * 240 ton/hr = | 2.88 lb/hr |
| | 2.88 lb/hr * 4400 hr/yr * 0.0005 ton/lb = | 6.34 ton/yr |

Drum-Mix Plant Asphalt Load-Out

Operating Parameters:

Process Rate: 240 ton/hr (Company Information)

Operating Hours: 8760 hr/yr (Annual Capacity)

PM Emissions

| | | |
|------------------|---|---|
| Emission Factor: | 0.00052 lb/ton | (AP-42, Section 11.1, Table 11.1-14, 3/04, Predictive EF) |
| Calculations: | 0.00052 lb/ton * 240 ton/hr = | 0.12 lb/hr |
| | 0.12 lb/hr * 4400 hr/yr * 0.0005 ton/lb = | 0.26 ton/yr |

PM₁₀ Emissions

| | | |
|------------------|---|---|
| Emission Factor: | 0.00034 lb/ton | (AP-42, Section 11.1, Table 11.1-14, 3/04, , Predictive EF) |
| Calculations: | 0.00034 lb/ton * 240 ton/hr = | 0.08 lb/hr |
| | 0.08 lb/hr * 4400 hr/yr * 0.0005 ton/lb = | 0.18 ton/yr |

CO Emissions

| | | |
|------------------|---|---|
| Emission Factor: | 0.0013 lb/ton | (AP-42, Section 11.1, Table 11.1-14, 3/04, Predictive EF) |
| Calculations: | 0.0013 lb/ton * 240 ton/hr = | 0.31 lb/hr |
| | 0.31 lb/hr * 4400 hr/yr * 0.0005 ton/lb = | 0.68 ton/yr |

VOC Emissions

| | | |
|------------------|---|---|
| Emission Factor: | 0.0041 lb/ton | (AP-42, Section 11.1, Table 11.1-14, 3/04, Predictive EF) |
| Calculations: | 0.0041 lb/ton * 240 ton/hr = | 0.98 lb/hr |
| | 0.98 lb/hr * 4400 hr/yr * 0.0005 ton/lb = | 2.16 ton/yr |

Haul Roads/Vehicle Traffic

Operating Parameters:

Vehicle miles traveled: 5 VMT/day (Estimated)

Assumption: Rated Load Capacity < 50 tons

Haul Road Use: 365 day/yr

PM Emissions:

| | | |
|------------------|---|-------------------------------|
| Emission Factor: | 13.90 lb/VMT (controlled) | (AP-42 Section 13.2.2, 12/03) |
| Calculations: | 5.0 VMT/day * 13.90 lb/VMT = | 69.50 lb/day |
| | 69.50 lb/day * 365 day/yr * 0.0005 ton/lb = | 12.68 ton/yr |

PM₁₀ Emissions:

| | | |
|------------------|---|-------------------------------|
| Emission Factor: | 3.95 lb/VMT (controlled) | (AP-42 Section 13.2.2, 12/03) |
| Calculations: | 5 VMT/day * 3.95 lb/VMT = | 19.75 lb/day |
| | 19.75 lb/day * 365 day/yr * 0.0005 ton/lb = | 3.60 ton/yr |

Diesel Generator

Engine Size = 504 kW (454 kW, 609 HP output)

1 kW = 1.3410 hp 504 kW * 1.341 = 676 hp

Hours of Operation: 4400 hrs/yr

PM Emissions

| | | |
|------------------|--|--------------------------------|
| Emission Factor: | 0.00074 lbs/bhp-hr | (Caterpillar Performance Data) |
| | 0.5 lb/hr * 4400 hr/yr * 0.0005 ton/lb = | 1.10 ton/yr (restricted) |

PM-10 Emissions

| | | | | |
|-----------------|--|---|-------|---------------------|
| Emission Factor | 0.00074 lbs/bhp-hr | (Caterpillar Performance Data) | | |
| | 0.5 lb/hr * 4400 hr/yr * 0.0005 ton/lb = | | 1.10 | ton/yr (restricted) |
| NOx Emissions | | | | |
| Emission Factor | 0.0198 lbs/bhp-hr | (Caterpillar Performance Data) | | |
| | 13.38 lb/hr * 4400 hr/yr * 0.0005 ton/lb = | | 29.44 | ton/yr (restricted) |
| CO Emissions | | | | |
| Emission Factor | 0.00065 lbs/bhp-hr | (Caterpillar Performance Data) | | |
| | 0.44 lb/hr * 4400 hr/yr * 0.0005 ton/lb = | | 0.97 | ton/yr (restricted) |
| VOC Emissions | | | | |
| Emission Factor | 0.00012 lbs/bhp-hr | (Caterpillar Performance Data) | | |
| | 0.08 lb/hr * 4400 hr/yr * 0.0005 ton/lb = | | 0.18 | ton/yr (restricted) |
| SOx Emissions | | | | |
| Emission Factor | 0.00205 lbs/hp-hr | (AP-42 Table 3.3-1 "worst-case" diesel < 600 HP, 10/96) | | |
| | 1.39 lb/hr * 4400 hr/yr * 0.0005 ton/lb = | | 3.06 | ton/yr (restricted) |
| HAP Emissions | | | | |
| Emission Factor | 0.00376 lb/MMBtu | (AP-42 Table 3.3-2 "worst-case" diesel < 600 HP, 10/96) | | |
| | 0.01 lb/hr * 4400 hr/yr * 0.0005 ton/lb = | | 0.02 | ton/yr (restricted) |

V. Existing Air Quality

Permit #2735-03 is issued for the operation of a portable drum mix asphalt plant to be initially located in the southwest ¼, of the northeast ¼ of Section 12, Township 6 North, Range 21 West, in Ravalli County, Montana. Permit #2735-03 also applies while operating at any location within Montana, except within those areas having a Department-approved permitting program or those areas considered to be tribal lands. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* The Department determined that the amount of controlled emissions generated by this facility will not exceed any set ambient air quality standard. In addition, this source is portable and will operate on an intermittent and temporary basis at any given location, so any air quality impacts will be minimal.

Addendum 3 and Permit #2735-03 apply to the Blahnik facility while operating at specific locations in or within 10 km of certain PM₁₀ nonattainment areas during the winter months, as approved by the Department, and at any location in or within 10 km of any PM₁₀ nonattainment areas during the summer months.

VI. Ambient Air Quality Impacts

Permit #2735-03 is issued for a portable drum-mix asphalt plant to be located at various locations throughout Montana. This permit contains operational conditions and limitations that will protect air quality for any given operating site and the surrounding area. Also, this facility is a portable source that will operate on an intermittent and temporary basis; therefore, any impacts to air quality will be minor and short-lived. Further, the amount of controlled emissions generated by this project will not cause concentrations of pollutants in the ambient air that exceed any set ambient standard.

VII. Taking or Damaging Implication Analysis

As required by 2-10-101 through 2-10-105, MCA, the Department conducted a private property

taking and damaging assessment and determined that there are no taking or damaging implications.

VIII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act (MEPA), was completed for this project. A copy is attached.

ADDENDUM 3
Helena Sand & Gravel, Inc., dba Blahnik Construction
Permit #2735-03

An addendum to air quality Permit #2735-03 is issued to Helena Sand & Gravel, Inc., doing business as Blahnik Construction (Blahnik) pursuant to Section 75-2-204 and 75-2-211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.765, as amended, for the following:

I. Permitted Equipment

Blahnik owns and operates a portable drum-mix asphalt plant. Equipment used at the facility includes:

- 1992 Portable Asphalt Plant – parallel flow drum mix process, with baghouse (maximum 240 tons per hour (ton/hr));
- Asphalt hot oil storage with diesel burner (approx 7.5 gallons per hour (gph));
- Aggregate storage piles, storage bins, screens, and conveyors;
- Lime silo with dust control (30 ton capacity, 2.5 ton/hr throughput rate);
- Hot mix asphalt storage silo filling & truck loadout;
- 676 horsepower (hp) backup power diesel generator (454 kilowatt (kW)); and
- Associated equipment.

II. Seasonal and Site Restrictions

Addendum 3 applies to Blahnik while operating at any location in or within 10 kilometers (km) of certain particulate matter less than 10 microns (PM₁₀) nonattainment areas. Additionally, seasonal and site restrictions apply to the facility as follows:

- A. During the winter season (October 1 through March 31) Blahnik may operate at any site that may be approved by the Department of Environmental Quality (Department), in writing.
- B. During the summer season (April 1 through September 30): Blahnik may operate at any location in or within 10 km of the Kalispell, Whitefish, and Columbia Falls PM₁₀ nonattainment areas.

Blahnik shall comply with the limitations and conditions contained in Addendum 3 to Permit #2735-03 while operating in or within 10 km of any PM₁₀ nonattainment areas. Addendum 3 shall be valid until revoked or modified. The Department reserves the authority to modify Addendum 3 at any time based on local conditions of any future site. These conditions may include, but are not limited to, local terrain, meteorological conditions, proximity to residences or other businesses, etc.

III. Limitations and Conditions

- A. Operational Limitations and Conditions: **Summer Season (April 1 through September 30)**
 - 1. Asphalt plant particulate matter emissions shall be limited to 0.04 grains per dry standard cubic feet (gr/dscf) (ARM 17.8.752).
 - 2. Blahnik shall not cause or authorize to be discharged into the atmosphere from the facility any visible emissions which exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).

3. Blahnik shall not cause or authorize to be discharged into the atmosphere from the facility any fugitive emissions, including, but not limited to, truck loading or unloading and material transfer operations, which exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).
4. Water and water spray bars shall be available on site at all times and operated, as necessary, to maintain compliance with the opacity limitations in Section III.A.2 and III.A.3 (ARM 17.8.749).
5. Blahnik shall not cause or authorize to be discharged into the atmosphere from haul roads, access roads, parking lots, or the general plant property any visible fugitive emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).
6. Blahnik shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).
7. Blahnik shall treat all unpaved portions of the access roads, parking lots, and general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions and visible fugitive emission limitations in Section III.A.5 and Section III.A.6 (ARM 17.8.749).
8. During the summer season, asphalt plant production shall not exceed 5760 tons per day (ARM 17.8.749).

B. Operational Limitations and Conditions: **Winter Season (October 1 through March 31)**

1. Asphalt plant particulate matter emissions shall be limited to 0.04 grains per dry standard cubic feet (gr/dscf) (ARM 17.8.752).
2. Blahnik shall not cause or authorize to be discharged into the atmosphere from the facility any visible emissions which exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).
3. Blahnik shall not cause or authorize to be discharged into the atmosphere from the facility any fugitive emissions, including, but not limited to, truck loading or unloading and material transfer operations, which exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).
4. Water and water spray bars shall be available on site at all times and operated, as necessary, to maintain compliance with the opacity limitation in Sections III.B.2 and III.B.3 (ARM 17.8.749).
5. Blahnik shall not cause or authorize to be discharged into the atmosphere from haul roads, access roads, parking lots, or the general plant property any visible fugitive emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).
6. Blahnik shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).

7. Blahnik shall treat all unpaved portions of the access roads, parking lots, and general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions and visible fugitive emission limitations in Section III.B.5 and Section III.B.6 (ARM 17.8.749).
8. During the winter season, asphalt plant production shall not exceed 7 hours per day (ARM 17.8.749).
9. During the winter season, asphalt plant production shall not exceed 1680 tons per day (ARM 17.8.749).
10. During the winter season, Blahnik shall not operate the diesel generator (ARM 17.8.749).

C. Operational Reporting Requirements (**Winter and Summer Seasons**)

1. Blahnik shall provide written notice of relocation of the permitted equipment at least 15 days prior to the physical transfer of equipment (ARM 17.8.765).
2. During the summer season (April 1 through September 30), Blahnik shall document the daily asphalt production from the facility. The daily information will be used to verify compliance with the limitation in Section III.A.8 (ARM 17.8.749).
3. During the winter season (October 1 through March 31), Blahnik shall document the daily asphalt production and the total hours of operation for the asphalt plant and generator. The daily information will be used to verify compliance with the limitations in Section III.B.8, III.B.9, and III.B.10 (ARM 17.8.749).
4. Production information for the site(s) covered by this addendum must be maintained for 5 years. The information shall include (ARM 17.8.749):
 - a. Daily tons of asphalt produced
 - b. Daily hours of operation for the asphalt plant
 - c. Daily hours of operation for the generator engine
 - d. Type and amount of fuel used for the:
 - i. Asphalt plant (hot-mix dryer)
 - ii. Hot oil heater
 - iii. Diesel generator
 - e. Fugitive dust information consisting of the total miles driven on unpaved roads for all plant vehicles.

ADDENDUM 3 ANALYSIS
Helena Sand & Gravel, Inc., dba Blahnik Construction
Permit #2735-03

I. Permitted Equipment

Helena Sand & Gravel, Inc., doing business as Blahnik Construction (Blahnik) owns and operates a portable drum-mix asphalt plant. Equipment used at the facility includes:

- 1992 Portable Asphalt Plant – parallel flow drum mix process, with baghouse (maximum 240 tons per hour (ton/hr));
- Asphalt hot oil storage with diesel burner (approx 7.5 gallons per hour (gph));
- Aggregate storage piles, storage bins, screens, and conveyors;
- Lime silo with dust control (30 ton capacity, 2.5 ton/hr throughput rate);
- Hot mix asphalt storage silo filling & truck loadout;
- 676 horsepower (hp) backup power diesel generator (454 kilowatt (kW)); and
- Associated equipment.

II. Current Permit Action

On January 22, 2008, the Department of Environmental Quality (Department) received a request from Blahnik for a permit modification. Specifically, this permit modification added a 676 hp diesel genset unit, and updated Addendum 2 (which expired in 1999) to Addendum 3, to allow for operation in or within 10 km of certain particulate matter less than 10 microns (PM₁₀) nonattainment areas. Further, the Department updated the emission inventory for the permitted facility to reflect up-to-date published emission factors for hot-mix asphalt plants and updated Addendum 3 to reflect current Department modeling guidance for portable or temporary sources operating in or within 10 km of certain PM₁₀ nonattainment areas during the winter season. Permit #2735-03 replaces Permit # 2735-02.

III. Source Description

For a typical operational set-up, stockpiled aggregate is loaded into the cold feeder. The aggregate is dispensed from the bins, and dumped onto feeder conveyors that transfer the aggregate to the drum-mix dryer. The aggregate travels through the rotating drum where asphalt oil and lime is added to the dryer. The dryer drum mixes the asphalt oil, lime, and the aggregate. The resulting hot-mix asphalt is loaded into a hot-mix asphalt storage silo where it is stored until the asphalt is dumped into trucks for transport to the project site.

IV. Applicable Rules and Regulations

The following are partial quotations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department. Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

ARM 17.8, Subchapter 7 - Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:

- A. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.

- B. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
- C. ARM 17.8.765 Transfer of Permit. (1) This rule states that an air quality permit may be transferred from one location to another if the Department receives a complete notice of intent to transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.

Blahnik must submit proof of compliance with the transfer and public notice requirements when they transfer to the location covered by this addendum and will only be allowed to stay in the new location for a period of less than 1 year. Also, the conditions and controls of this addendum will keep Blahnik from having a significant impact on the PM₁₀ nonattainment areas covered by this permit.

V. Emission Inventory

Summer Season (not restricted)

| Emitting Unit | lb/day | | | | | |
|---|---------------|------------------|-----------------|---------------|---------------|-----------------|
| | PM | PM ₁₀ | NO _x | CO | VOC | SO _x |
| Drum Mix Asphalt Plant Dryer | 84.00 | 132.48 | 316.80 | 748.80 | 184.32 | 63.36 |
| Hot Oil Heater | | | | 0.24 | | |
| Cold Aggregate Storage Piles | 37.20 | 17.52 | | | | |
| Cold Aggregate Screens and Storage Bins | 62.16 | 37.92 | | | | |
| Cold Aggregate Handling/Conveyors | 34.56 | 12.72 | | | | |
| Lime Silo | 4.08 | 4.08 | | | | |
| Asphalt Product Silo Filling | 0.48 | 1.44 | | 6.96 | 69.12 | |
| Drum Mix Plant Asphalt Load-Out | 2.88 | 1.92 | | 7.44 | 23.52 | |
| Diesel Generator | 12.00 | 12.00 | 321.12 | 10.56 | 1.92 | 33.36 |
| Haul Roads/Vehicle Traffic | 69.60 | 19.68 | | | | |
| Total | 306.96 | 239.76 | 637.92 | 774.00 | 278.88 | 96.72 |
| Note: Summer Season Emission Inventory (April 1 through September 30) | | | | | | |

*A complete emissions inventory is on file with the Department.

Winter Season (restricted to 7 hrs per day)

| Emitting Unit | lb/day | | | | | |
|---|--------------|------------------|-----------------|---------------|--------------|-----------------|
| | PM | PM ₁₀ | NO _x | CO | VOC | SO _x |
| Drum Mix Asphalt Plant Dryer | 24.50 | 38.64 | 92.40 | 218.40 | 53.76 | 18.48 |
| Hot Oil Heater | | | | 0.24 | | |
| Cold Aggregate Storage Piles | 10.85 | 5.11 | | | | |
| Cold Aggregate Screens and Storage Bins | 18.13 | 11.06 | | | | |
| Cold Aggregate Handling/Conveyors | 10.08 | 3.71 | | | | |
| Lime Silo | 1.19 | 1.19 | | | | |
| Asphalt Product Silo Filling | 0.14 | 0.42 | | 2.03 | 20.16 | |
| Drum Mix Plant Asphalt Load-Out | 0.84 | 0.56 | | 2.17 | 6.86 | |
| Diesel Generator (not allowed in winter) | -- | -- | -- | -- | -- | -- |
| Haul Roads/Vehicle Traffic | 20.85 | 5.93 | | | | |
| Total | 86.58 | 66.62 | 92.40 | 222.84 | 80.78 | 18.48 |
| Note: Winter Season Emission Inventory (October 1 through March 31) | | | | | | |

*A complete emissions inventory is on file with the Department.

VI. Existing Air Quality

On July 1, 1987, the Environmental Protection Agency (EPA) promulgated new National Ambient Air Quality Standards (NAAQS) for PM₁₀. Due to exceedances of the national standards for PM₁₀, the cities of Kalispell (and the nearby Evergreen area), Columbia Falls, Butte, Whitefish, Libby, Missoula, and Thompson Falls were designated by EPA as nonattainment for PM₁₀. As a result of this designation, the EPA required the Department and the City-County Health Departments to submit PM₁₀ State Implementation Plans (SIP). The SIPs consisted of emission control plans that controlled fugitive dust emissions from roads, parking lots, construction, and demolition, since technical studies determined these sources to be the major contributors to PM₁₀ emissions.

Addendum 3 to Permit #2735-03 contains operational conditions and limitations that will protect air quality for operations in or within 10 km of any PM₁₀ nonattainment area during the summertime and at specific locations in or within 10 km of certain PM₁₀ nonattainment areas, as approved by the Department, during the wintertime.

VII. Air Quality Impacts

Addendum 3 to Permit #2735-03 sets more stringent conditions and limitations (more stringent than Permit #2735-03) applicable to this asphalt plant while located in or within 10 km of any PM₁₀ nonattainment area during the summertime and within Department-approved PM₁₀ nonattainment areas during the wintertime.

Screen3 dispersion modeling was performed for the generator and the asphalt plant for wintertime operations, to ensure that point source emissions did not have an ambient impact over 5 mg/m³. Based on the stack characteristics and the maximum hourly emission rate, Screen3 predicted the facility's highest impact would be at 165 meters. In accordance with Department policy, the 1-hour impact was converted to a 24-hr restricted impact by using a multiplier of 0.4 and scaling for the restricted hours of operation. Analysis of the maximum 24-hour impacts from the diesel generator and the asphalt plant indicated that Blahnik could operate either (1) both the generator and the asphalt plant for up to 4.5 hours/day or (2) only the asphalt plant for up to 7 hours/day. Blahnik preferred to restrict the asphalt plant to 7 hours/day for wintertime nonattainment area operations. In the view of the Department, the conditions and limitations contained in Addendum 3 are protective of the PM₁₀ nonattainment areas.

VIII. Taking or Damaging Implication Analysis

As required by 2-10-101 through 2-10-105, MCA, the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

IX. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act (MEPA), was completed for this project. A copy is attached.

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air Resources Management Bureau
1520 East 6th Avenue
P.O. Box 200901
Helena, Montana 59620-0901
(406) 444-3490

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Helena Sand & Gravel, Inc.
d.b.a. Blahnik Construction
759 US Hwy 93 N
P.O. Box 1129
Hamilton, MT 59840

Air Quality Permit Number: 2735-03

Preliminary Determination Issued: 04/04/08

Department Decision Issued: 04/22/08

Permit Final:

1. *Legal Description of Site:* This permit is for the operation of a portable asphalt plant originally located in the southwest ¼ of the northeast ¼ of Section 12, Township 6 North, Range 21 West, in Ravalli County, Montana. Permit #2735-03 would apply while operating at any location in Montana, except within those areas having a Department-approved permitting program or those areas considered tribal lands. Addendum #3 is included in this air quality permit, to allow Blahnik to operate in or within 10 km of certain PM₁₀ nonattainment areas. *A Missoula County air quality permit would be required for locations within Missoula County, Montana.*
2. *Description of Project:* This permit modification adds a 676-hp diesel backup power genset unit, and updates Addendum 2 (which expired in 1999) to Addendum 3, to allow for operation in or within 10 km of certain PM₁₀ nonattainment areas. Further, the Department updated the emission inventory for the permitted facility to reflect up-to-date published emission factors for hot-mix asphalt plants and updated Addendum 3 to reflect current Department modeling guidance for portable or temporary sources operating in or within 10 km of certain PM₁₀ nonattainment areas during the winter season.
3. *Objectives of Project:* The object of the project would be to operate the business in a cost-effective manner to provide revenue for the company by the sale and use of asphalt. The issuance of Permit #2735-03 and Addendum 3 would allow Blahnik to operate the permitted equipment at various locations throughout Montana, including the proposed initial site location.
4. *Additional Project Site Information:* In many cases, the drum mix asphalt plant operation may move to a general site location, or open cut pit, which has been previously permitted through the Industrial and Energy Minerals Bureau (IEMB). If this were the case, a more extensive EA for the site would have been conducted and would be found in the Mined Land Reclamation Permit for that specific site.
5. *Alternatives Considered:* In addition to the proposed action, the Department considered the “no-action” alternative. The “no-action” alternative would deny issuance of the air quality permit to the proposed facility. However, the Department does not consider the “no-action” alternative to

be appropriate because Blahnik demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the “no-action” alternative was eliminated from further consideration.

6. *A Listing of Mitigation, Stipulations, and Other Controls:* A list of enforceable conditions and a permit analysis, including a BACT analysis, would be contained in Permit #2735-03.
7. *Regulatory Effects on Private Property:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and would not unduly restrict private property rights.
8. *The following table summarizes the potential physical and biological effects of the proposed project on the human environment.* The “no action alternative” was discussed previously.

| | | Major | Moderate | Minor | None | Unknown | Comments Included |
|----|---|-------|----------|-------|------|---------|-------------------|
| A. | Terrestrial and Aquatic Life and Habitats | | | X | | | yes |
| B. | Water Quality, Quantity, and Distribution | | | X | | | yes |
| C. | Geology and Soil Quality, Stability, and Moisture | | | X | | | yes |
| D. | Vegetation Cover, Quantity, and Quality | | | X | | | yes |
| E. | Aesthetics | | | X | | | yes |
| F. | Air Quality | | | X | | | yes |
| G. | Unique Endangered, Fragile, or Limited Environmental Resource | | | X | | | yes |
| H. | Demands on Environmental Resource of Water, Air, and Energy | | | X | | | yes |
| I. | Historical and Archaeological Sites | | | | X | | yes |
| J. | Cumulative and Secondary Impacts | | | X | | | yes |

Summary of Comments on Potential Physical and Biological Effects: The following comments have been prepared by the Department.

A. Terrestrial and Aquatic Life and Habitats

Terrestrials would use the same area as the asphalt plant operation. The asphalt plant operation would be considered a minor source of emissions (by industrial standards) with intermittent and seasonal operations. Furthermore, the plant is part of an 11-acre site that has been an active gravel pit for many years. Therefore, only minor effects on terrestrial life and aquatic life would be expected as a result of the proposed changes of equipment operations or from pollutant deposition.

B. Water Quality, Quantity, and Distribution

Water would be used for dust suppression on the surrounding roadways and areas of operation and for pollution control for equipment operations. However, water use would only cause minor impacts upon water quality, quantity, and distribution at the site

because the equipment would only have seasonal and intermittent operations, only relatively small amounts of water would be needed for pollution control, and water would be readily available at the site. There are no proposed changes that would have an impact on surface water, groundwater, or drainage patterns on or off site. Overall, any associated impacts would be minor.

C. Geology and Soil Quality, Stability, and Moisture

The proposed addition of a backup diesel generator would have only minor impacts on soils in any proposed site location because the facility would remain a relatively small industrial operation, would continue to use only relatively small amounts of water for pollution control, and would only have seasonal and intermittent operations.

D. Vegetation Cover, Quantity, and Quality

Because the modified facility would remain a minor source of emissions, by industrial standards, and would typically operate in areas previously designated and used for non-metallic mineral processing operations, impacts from the emissions from the modified asphalt plant would be minor. As described in Section 8.F of this EA, the amount of air emissions generated from the modified facility would be minor. As a result, the corresponding deposition of the air pollutants on the surrounding vegetation would also be minor. Also, because water use for pollution control would be minimal, as described in Section 8.B, and the associated soil disturbance from modified operations would be minimal, as described in Section 8.C, corresponding vegetative impacts would be minor.

E. Aesthetics

The 676-hp Genset would be visible and would create additional noise in the area. The nearest residence is 200 feet to the south; however, Permit #2735-03 and Addendum #3 would include conditions to control emissions from the Genset as well as the rest of the plant. The Genset and the asphalt plant operations would have a minor amount of emissions, would be portable, would have seasonal and intermittent operations, and the primary location would be within a rather large open cut pit near an existing highway. Therefore, any visual and noise impacts would be minor.

F. Air Quality

The air quality impacts from the Genset, as well as the asphalt operations, would be minor because Permit #2735-03 and Addendum #3 would include conditions limiting the opacity from the plant, as well as requiring a baghouse and other means to control air pollution. Additionally, the facility is considered a minor source of air pollution by industrial standards and would be located in an area where good air pollutant dispersion would occur. Therefore, the air impacts would be minor.

The operations would be limited, by Permit #2735-03, to total emissions of 250 TPY or less of any regulated pollutant from non-fugitive sources at the plant, including any additional equipment operated at the site. Furthermore, the facility emissions would be subject to BACT. For example, the plant would be required to use water to reduce emissions from equipment operations, storage piles, and haul roads. Also, the operation would have temporary and intermittent use, thereby further reducing potential air quality impacts from the facility. Therefore, air quality impacts would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department, in an effort to assess any potential impacts to any unique endangered, fragile, or limited environmental resources in the initial proposed area of operation (southwest ¼, of the northeast ¼ of Section 12, Township 6 North, Range 21 West, in Ravalli County, Montana), contacted the Natural Resource Information System – Montana Natural Heritage Program. Search results concluded there are seven species of concern within the area. The search area, in this case, is defined by the section, township, and range of the proposed site, with an additional one-mile buffer. The known species of concern include four vertebrates: the Gray Wolf (Endangered), Bald Eagle, Bull Trout (Threatened), Fringed Myotis, Townsend's Big-eared Bat, Westslope Cutthroat Trout (Sensitive), and Western Skink.

While these species may be found within the search area, these animals may have many miles of potential habitat. Specific effects of operating the asphalt plant and diesel engine in this area would be minor since the facility is relatively small in size, typically operates within an existing and previously disturbed industrial site, would have only seasonal and intermittent operations in the area, and is primarily located adjacent to highway 93. Therefore, the Department determined that any effects upon these species would be minor and short-lived.

H. Demands on Environmental Resources of Water, Air, and Energy

Due to the size of the facility, the modified asphalt plant operation would only require small quantities of water, air, and energy for proper operation. Small quantities of water would be used for dust suppression and would control fugitive emissions being generated at the site. Energy requirements would also be small because the facility is small by industrial standards and would be powered by electricity and one backup industrial diesel generator. In addition, impacts to air resources would be minor because the source is small by industrial standards, with intermittent and seasonal operations, and because air pollutants generated by the facility would be widely dispersed. Furthermore, the particulate emissions would be controlled. Therefore, any impacts to water, air, and energy resources would be minor.

I. Historical and Archaeological Sites

According to correspondence from the Montana Historical Society, State Historic Preservation Office (SHPO), there have been no previously recorded sites in the area. Also, according to previous correspondence with SHPO, there would be a low likelihood of disturbance to any known archaeological or historical site given previous industrial disturbance in any given area of operation. Therefore, it is unlikely that the project would impact any historical or archaeological sites in a given area of operation.

J. Cumulative and Secondary Impacts

The addition of the generator to the asphalt plant operation would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility would have seasonal and intermittent use and because the facility is considered a minor source of air pollutants by industrial standards. The modified facility would also have additional restrictions while operating in or within 10 km of certain PM₁₀ nonattainment areas, which would further control pollutant emissions. The facility would generate emissions of PM, PM₁₀, NO_x, VOC, CO, and SO_x. Noise would also be generated from the site. Emissions and noise would cause minimal disturbance and noise at the initial site location. Additionally, this facility, in combination with the other emissions from the site would not be permitted to exceed 250

TPY of non-fugitive emissions.

9. *The following table summarizes the potential economic and social effects of the proposed project on the human environment. The “no action alternative” was discussed previously.*

| | | Major | Moderate | Minor | None | Unknown | Comments Included |
|----|---|-------|----------|-------|------|---------|-------------------|
| A. | Social Structures and Mores | | | | X | | yes |
| B. | Cultural Uniqueness and Diversity | | | | X | | yes |
| C. | Local and State Tax Base and Tax Revenue | | | X | | | yes |
| D. | Agricultural or Industrial Production | | | X | | | yes |
| E. | Human Health | | | X | | | yes |
| F. | Access to and Quality of Recreational and Wilderness Activities | | | X | | | yes |
| G. | Quantity and Distribution of Employment | | | | X | | yes |
| H. | Distribution of Population | | | | X | | yes |
| I. | Demands for Government Services | | | X | | | yes |
| J. | Industrial and Commercial Activity | | | | X | | yes |
| K. | Locally Adopted Environmental Plans and Goals | | | X | | | yes |
| L. | Cumulative and Secondary Impacts | | | X | | | yes |

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS:

The Department has prepared the following comments.

A. Social Structures and Mores

The addition of a backup diesel generator to the portable asphalt plant would cause no disruption to the social structures and mores in the area because the facility is a minor source of emissions, would initially and typically operate in an existing industrial site, and would operate on a temporary and intermittent basis. Further, the plant would be required to operate according to the limits and conditions that would be included in Permit 2735-03, which would limit any impacts to social structures and mores.

B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of the area would not be impacted by the proposed backup diesel generator because it is part of an existing asphalt plant located within an existing gravel pit. Additionally, the facility would be considered a portable/temporary source with seasonal and intermittent operations. Also, the predominant use of the surrounding area would not change as a result of this project.

C. Local and State Tax Base and Tax Revenue

The addition of the backup diesel generator would have little, if any, impact on the local and state tax base and tax revenue. The facility requires the use of approximately 25 employees. There will be no additional employment to accommodate the proposed changes in operations. The backup diesel generator will allow the facility to operate during times of electrical interruption or at locations without land lines. Thus, only

minor impacts to the local and state tax base and revenue could be expected from the employees and facility production. Furthermore, the impacts to local tax base and revenue are expected to be minor because the source would be portable and the money generated for taxes would be widespread.

D. Agricultural or Industrial Production

The addition of a backup diesel generator would have only a minor impact on local industrial production since the facility is existing and is located in an existing gravel pit. Because of the seasonal and intermittent use of the equipment and the staged use of the proposed project site, only minor and temporary effects to the existing agricultural land are expected to occur. As described in Section 8.D, impacts to vegetation would be minimal. Also, operational limits would be established (including those in Addendum #3) to protect the environment. Therefore, any effects upon agricultural or industrial production would be minor and short-lived.

E. Human Health

Permit #2735-03 and Addendum #3 would incorporate conditions to ensure that the asphalt plant would be operated in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. As described in Section 8.F., the air emissions from this facility are minimized by the use of a baghouse on the asphalt plant as well as emission limits established in Permit #2735-03 and Addendum #3. Therefore, only minor impacts would be expected upon human health from the asphalt plant.

F. Access to and Quality of Recreational and Wilderness Activities

Noise from the proposed modified facility would be minor because the asphalt plant operation would remain small by industrial standards and would operate in areas typically used for such operations. As a result, the amount of noise generated from the proposed change in operations would be minimal and typical for the area. Also, the facility would operate on a seasonal and intermittent basis. Therefore, any impacts to the quality of recreational and wilderness activities created by the proposed new equipment operating with the existing asphalt plant would be minor and short-lived.

G. Quantity and Distribution of Employment

H. Distribution of Population

The asphalt plant operation employs approximately 25 people, which is not expected to change as a result of this permit modification. Therefore the proposed addition of a backup diesel generator would not impact the above-cited economic and social resources of the human environment of any given project area.

I. Demands of Government Services

Minor increases would be seen in traffic on existing roadways in the area while the asphalt plant operations are in progress. In addition, government services would be required for acquiring the appropriate permits from government agencies. Demands for government services would be minor.

J. Industrial and Commercial Activity

The addition of a backup diesel generator would represent only a minor increase in the industrial activity in the given area because of the size of the operations (relatively small by industrial standards) and the portable and temporary nature of the facility. No additional industrial or commercial activity would be expected as a result of the proposed operations.

K. Locally Adopted Environmental Plans and Goals

Blahnik would be allowed, by permit, to operate the diesel generator in areas designated by EPA as attainment, unclassified, or in or within 10 kilometers of certain PM₁₀ nonattainment areas in the summer months. Permit #2735-03 and Addendum #3 would contain limits, which would be protective of air quality and the ambient air quality standards while the facility is operating in these designated areas. Additionally, because the facility is a portable source that will operate at multiple sites on an intermittent and temporary basis, the Department determined that any impacts to existing air quality in these areas of operation would be minor and short-lived.

L. Cumulative and Secondary Impacts

The asphalt plant would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area because the source is a portable, temporary source. Minor increases in traffic would have minor effects on local traffic in the immediate area, thus, having a direct effect on the social environment. Because the source is relatively small (by industrial standards) and temporary, only minor economic impacts to the local economy could be expected from the operation of the facility. Thus, minor and temporary cumulative effects would result to the local economy.

Recommendation: An Environmental Impact Statement (EIS) is not required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: All potential effects resulting from construction and operation of the proposed facility are minor; therefore, an EIS is not required.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Natural Heritage Program; and the State Historic Preservation Office (Montana Historical Society).

Individuals or groups contributing to this EA: Department of Environmental Quality (Air Resources Management Bureau), Montana Natural Heritage Program, and State Historic Preservation Office (Montana Historical Society).

EA prepared by: Christine Weaver

Date: March 21, 2008